# Author Index
# Volume 25


Adams, Martin David, see Perera, L. D. L.

Amidi, Omead, see Kelly, Alonzo.

An, J. and D.-S. Kwon, Stability and Performance of Haptic Interfaces with Active/Passive Actuators—Theory and Experiments, 25(11), 1121–1136.

Ang, Marcelo, see Khatib, Oussama.

Aoki, Takeshi, see Mishima, Daisuke.

Arai, Eiji, see Wakamatsu, Hidefumi.

Armada, Manuel A., see Montes, Hector.

Armada, Manuel and Martin Buehler, Editorial, 25(9), 821–823.

Armstrong, Brian, José Gutierrez, Bruce A. Wade, and Ralph Joseph, Stability of Phase-Based Gain Modulation with Designer-Chosen Switch Functions, 25(8), 781–796.

Arnell, Fredrik, see Petersson, Lars.

Asama, Hajime, Editorial on the Special Issue on the Fourth International Conference on Field and Service Robotics (FSR '03), 25(1), 3–5.

Asbeck, Alan T., Sangbee Kim, M.R. Cutkosky, William R. Povancher, and Michele Lanzetta, Sealing Hard Vertical Surfaces with Complaint Microspine Arrays, 25(12), 1165–1180.

Balkcom, Devin J., Paritosh A. Kavathekar and Matthew T. Mason, Time-optimal Trajectories for an Omni-directional Vehicle, 25(10), 985–999.

Barnes, Nick, see Petersson, Lars.

Bessière, Pierre, see Coue, Christophe.

Beyl, Pieter, see Vanderborght, Bram.

Birglen, Lionel and Clément Gosselin, Force Analysis of Connected Differential Mechanisms: Application to Grasping, 25(10), 1033–1046.

Bode, Mike, see Kelly, Alonzo.

Bradley, David, see Kelly, Alonzo.

Bretl, Timothy, Motion Planning of Multi-Limbed Robots Subject to Equilibrium Constraints: The Free-Climbing Robot Problem, 25(4), 317–342.

Brock, Oliver, Sven Koenig, Nicholas Roy, and Guarav Sakhatme, Editorial, 25(12), 1163.

Bruneau, Olivier, see Sabourin, Christophe.

Buche, Gabriel, see Sabourin, Christophe.

Buehler, Martin, see Armada, Manuel.

Buehler, Martin, see Poulakakis, Ioannis.

Butler, Zack, Peter Corke, Ron Peterson, and Daniela Rus, From Robots to Animals: Virtual Fences for Controlling Cattle, 25(5), 485–508.

Caldwell, Darwin G., see Davis, S.

Cheah, C. C., C. Liu, and J.J.E. Slotine, Adaptive Tracking Control for Robots with Unknown Kinematic and Dynamic Properties, 25(3), 283–296.

Chen, Cheng and Han Wang, Appearance-Based Topological Bayesian Inference for Loop-Closing Detection in a Cross-Country Environment, 25(10), 953–984.

Chen, I-Ming, see Pham, Huy-Hoang.

Chirikjian, Gregory S., see Webster III, Robert J.

Clark, Jonathan E., see Kim, Sangbae.

Cohen, Ofir, Yael Edan, and Edna Schechtman, Statistical Evaluation Method for Comparing Grid Map Based Sensor Fusion Algorithms, 25(2), 117–133.

Colgate, J. Edward, see Faulring, Eric L.

Corke, Peter, see Butler, Zack.

Coue, Christophe, Cédric Pradalier, Christian Laugier, Thierry Fraichard, and Pierre Bessière, Bayesian Occupancy Filtering for Multitarget Tracking: An Automotive Application, 25(1), 19–30.

Cowan, Noah J., see Webster III, Robert J.

Cruse, Holk, see Schneider, Axel.

Cutkosky, Mark R., see Asbeck, Alan.

Cutkosky, Mark R., see Kim, Sangbae.

Dario, Paolo, see Stefanini, Cesare.

Davis, S. and Darwin G. Caldwell, Braid Effects on Contractile Range and Friction Modeling in Pneumatic Muscle Actuators, 25(4), 359–369.

de Silva, Vin, see Ghrist, R.

Dellaert, F. and M. Kaess, Square Root SAM: Simultaneous Localization and Mapping via Square Root Information Smoothing, 25(12), 1181–1203.

Diaz-Calderon, Antonio, see Kelly, Alonzo.

Donamukkala, Raghavendra Rao, see Vandapel, Nicolas.

Dubowsky, Steven, see Lichter, Matthew.

Duran, Bruno Meira Y, see Vanderborght, Bram.

Edan, Yael, see Cohen, Ofir.

Ekkelenkamp R., see Veneman, J.F.

Endou, Ken, see Yokoi, Kazuhito.

Esposito, Joel M., see Kim, Jongwoo.

Eustice, Ryan M., Hanumant Singh, John L. Leonard and Matthew R. Walter, Visually mapping the RMS Titanic: Conservative Covariance Estimates for SLAM information Filters, 25(12), 1223–1242.

Faulring, Eric L., J. Edward Colgate, and Michael A. Peshkin, The Cobotic Hand Controller: Desing, Controll and Performance of a Novel Haptic Display, 25(11), 1099–1120.

Feliu, V., see Morales, R.

Fletcher, Luke, see Petersson, Lars.

Fraichard, Thierry, see Coue, Christophe.

Fruchard, Matthieu, Pascal Morin and Claude Samson, A Framework for the Control of Nonholonomic Mobile Manipulators, 25(8), 745–780.

Galstyan, Aram, see Galstyan, Aram.

Galstyan, Aram, Chris Jones, Aram Galstyan and Maja J. Matarić, Analysis of Dynamic Task Allocation in Multi-Robot Systems, 25(3), 225–241.

Gao, Wen, and Mark Hinders, Mobile Robot Sonar Backscatter Algorithm for Automatically Distinguishing Walls, Fences, and Hedges, 25(2), 135–145.

Geisel, T., see Hass, J.

Geng, Tao, Bernd Porr and Florentin Wörgötter, Fast Biped Walking with a Sensor-driven Neuronal Controller and Real-time Online Learning, 25(3), 243–259.

Gerkey, Brian P., Sebastian Thrun, and Geoff Gordon, Visibility-based Pursuit-evasion with Limited Field of View, 25(4), 299–315.

Ghrist, R. and Vin de Silva, Coordinate-free coverage in sensor networks with controlled Boundaries Via Homology, 25(12), 1205–1222.

Gokyuu, Takuya, see Yokoi, Kazuhito.

González, A., see Morales, R.

Gordon, Geoff. see Gerkey, Brian.

Gosselin, Clément, see Birglen, Lionel.

Guillaume, P., see Vermeulen, J.

Guivant, Jose, see Nieto, Juan.

Gutierrez, José, see Armstrong, Brian.

Happold, Mike, see Kelly, Alonzo.

Hashtrudi-Zaad, Keyvan, see Smith, Andrew.

Hass, J., J. M. Herrmann, and T. Geisel, Optimal Mass Distribution for Passivity-Based Bipedal Robots, 25(11), 1087–1098.

Hasunuma, Hitoshi, see Yokoi, Kazuhito.

Hebert, Martial, see Vandapel, Nicolas.

Herman, Herman, see Kelly, Alonzo.

Herrmann, J. M., see Hass, J.

Hinders, Mark, see Gao, Wen.

Hirai, Shinichi, see Sugiyama, Yuuta.

Hirai, Shinichi, see Wakamatsu, Hidefumi.

Hirose, Shigeo, see Mishima, Daisuke.

Hollerbach, John M, Editorial, 25(2), 115–115.

Holmes, Philip, see Seipel, Justin.

Hosoda, Koh, see Takuma, Takashi.

Howard, Andrew, Lynne E. Parker, and Gaurav S. Sukhatme, Experiments with a Large Heterogeneous Mobile Robot Team: Exploration, Mapping, Deployment and Detection, 25(5), 431–447.

Howard, Andrew, Simultaneous Localization and Mapping using Particle Filters, 25(12), 1243–1256.

Hsu, David, Jean-Claude Latombe and Hanna Kurniawati, On the Probabilistic Foundations of Probabilistic Roadmap Planning, 25(7), 627–643.

Hsu, L., see Zachi, A. R. L.

Huang, Lihua, see Kazerooni, H.

Huber, Daniel F. and Nicolas Vandapel, Automatic Three-dimensional Underground Mine Mapping, 25(1), 7–17.

Ingvast, Johan, Jan Wikander and Christian Ridderström, The PVT, an Elastic Conservative Transmission, 25(10), 1013–1032.

Jones, Chris, see Galstyan, Aram.

Joseph, Ralph, see Armstrong, Brian.

Joskowicz, Leo, see Ostrovsky-Berman.

Kaneko, Makoto, see Kawahara, Tomohiro.

Kavathekar, Paritosh A., see Balkcom, Devin J.

Kawahara, Tomohiro, Shinji Tanaka and Makoto Kaneko, Non-Contact Stiffness Imager, 25(5), 537–549.

Kazerooni, H., Ryan Steger and Lihua Huang, Hybrid Control of the Berkeley Lower Extremity Exoskeleton (BLEEX), 25(5), 561–573.

Kelly, Alonzo, Anthony Stentz, Omead Amidi, Mike Bode, David Bradley, Antonio Diaz-Calderon, Mike Happold, Herman Herman, Robert Mandelbaum, Tom Pilarski, Pete Rander, Scott Thayer, Nick Vallidis and Randy Warner, Toward Reliable Off Road Autonomous Vehicles Operating in Challenging Environments, 25(5), 449–483.

Khatib, Oussama and Marcelo Ang, Editorial: IJRR Special Issue on ISER 04, 25(5), 399–401.

Khatib, Oussama, see Park, Jaeheung.

Kim, Jin Seob, see Webster III, Robert J.

Kim, Jongwoo, Joel M. Esposito and Vijay Kumar, Sampling-based algorithm for testing and validating Robot Controllers, 25(12), 1257–1272.

Kim, Sangbae, Jonathan E. Clark, and Mark R. Cutkosky, iSprawl: Design and Tuning for High-speed Autonomous Open-loop Running, 25(9), 903–912.

Kim, Sangbee, see Asbeck, Alan.

Kobayashi, Masami, see Yokoi, Kazuhito.

Koenig, Sven, see Brock, Oliver.

Krishnan, S., see Varadhan, G.

Kruidhof R., see Veneman, J.F.

Kumar, Vijay, see Kim, Jongwoo.

Kurniawati, Hanna, see Hsu, David.

Kwon, D.-S., see An, J.

Lanzetta, Michele, see Asbeck, Alan.

Latombe, Jean-Claude, see Hsu, David.

Latombe, Jean-Claude, see Saha, Mitul.

Laugier, Christian, see Coue, Christophe.

Lefeber, Dirk, see Vermeulen, J.

Lefeber, Dirk, see Vanderborght, Bram.

Leonard, John L., see Eustice, Ryan M.

Lichter, Matthew D., Hiroshi Ueno and Steven Dubowsky, Vibration Estimation of Flexible Space Structures using Range Imaging Sensors, 25(10), 1001–1012.

Liu C., see Cheah, C. C.

Lizarralde, F., see Zachi, A. R. L.

Mandelbaum, Robert, see Kelly, Alonzo.

Manocha, D., see Varadhan, G.

Mason, Matthew T., see Balkcom, Devin J.

Matarić, Maja J., see Galstyan, Aram.

Menciassi, Arianna, see Stefanini, Cesare.

Mihune, Humisato, see Yokoi, Kazuhito.

Mills, J. K., see Sun, D.

Mishima, Daisuke, Takeshi Aoki, and Shigeo Hirose, Development of a Pneumatically Controlled Expandable Arm for Rescue Searches in Tight Spaces, 25(1), 103–110.

Montemerlo, Michael, see Thrun, Sebastian.

Montes, Hector, Samir Nabulsi and Manuel A. Armada, Reliable, Built-in, High-Accuracy Force Sensing for Legged Robots, 25(9), 931–950.

Morales, R., V. Feliu, A. González and P. Pintado, Kinematic Model of a New Staircase Climbing Wheelchair and its Experimental Validation, 25(9), 825–841.

Morin, Pascal, see Fruchard, Matthieu.

Mourikis, Anastasios I. and Stergios I. Roumeliotis, Predicting the performance of Cooperative simultaneous Localization and Mapping (C-Slam), 25(12), 1273–1286.

Nabulsi, Samir, see Montes, Hector.

Nakashima, Katsumi, see Yokoi, Kazuhito.

Nebot, Eduardo, see Nieto, Juan.

Nelson, Bradley J., see Yesin, Berk.

Nieto, Juan, Jose Guivant, Eduardo Nebot and Eduardo Nebot, DenseSLAM: Simultaneous Localization and Dense Mapping, 25(8), 711–744.

Or, Y. and E. Rimon, Computation and Graphical Characterization of Robust Multiple-Contact Postures in Two-Dimensional Gravitational Environments, 25(11), 1071–1086.

Okamura, Allison M., see Webster III, Robert J.

Ortega, R., see Zachi, A. R. L.

Ostrovsky-Berman, Yaron and Leo Joskowicz, Relative Position Computation for Assembly Planning With Planar Toleranced Parts, 25(2), 147–170.

Papadopoulos, Evangelos, see Poulakakis, Ioannis.

Park, Jaeheung and Oussama Khatib, A Haptic Teleoperation Approach Based on Contact Force Control, 25(5), 575–591.

Parker, Lynne E., see Parker, Lynne E.

Perera, L. D. L., Wijerupage Sardha Wijesoma and Martin David Adams, The Estimation Theoretic Sensor Bias Correction Problem in Map Aided Localization, 25(7), 645–667.

Peshkin, Michael A., see Faulring, Eric L.

Peterson, Ron, see Butler, Zack.

Petersson, Lars, Luke Fletcher, Alexander Zelinsky, Nick Barnes, and Fredrik Arnell, Towards Safer Roads by Integration of Road Scene Monitoring and Vehicle Control, 25(1), 53–72.

Pham, Huy-Hoang, Hsien-Chi Yeh, and I-Ming Chen, Micromanipulation System Design Based on Selective Actuation Mechanisms, 25(2), 171–186.

Pilarski, Tom, see Kelly, Alonzo.

Pintado, P., see Morales, R.

Porr, Bernd, see Geng, Tao.

Poulakakis, Ioannis, Evangelos Papadopoulos and Martin Buehler, On the Stability of the Passive Dynamics of Quadrupedal Running with a Bounding Gait, 25(7), 669–687.

Povancher, William R., see Asbeck, Alan.

Pradalier, Cédric, see Coue, Christophe.

Rander, Pete, see Kelly, Alonzo.

Ren, L. see Sun, D.

Ridderström, Christian, see Ingvast, Johan.

Rimon, E., see Or, Y.

Roughgarden, Tim, see Saha, Mitul.

Roumeliotis, Stergios I., see Mourikis, Anastasios.

Roy, Nicholas, see Brock, Oliver.

Rus, Daniela, see Butler, Zack.

Ryu, Jeha, see Yoon, J.

Sabourin, Christophe, Olivier Bruneau and Gabriel Buche, Control Strategy for the Robust Dynamic Walk of a Biped Robot, 25(9), 843–860.

Saha, Mitul, Tim Roughgarden, Jean-Claude Latombe and Gildardo Sánchez-Ante, Planning Tours of Robotic Arms among Partitioned Goals, 25(3), 207–224.

Sakhatme, Guarav, see Brock, Oliver.

Samson, Claude, see Fruchard, Matthieu.

Sánchez-Ante, Gildardo, see Saha, Mitul.

Schechtman, Edna, see Cohen, Ofir.

Schmitz, Josef, see Schneider, Axel.

Schneider, Axel, Holk Cruse and Josef Schmitz, Decentralized Control of Elastic Limbs in Closed Kinematic Chains, 25(9), 913–930.

Seipel, Justin E. and Philip Holmes, Three-dimensional Translational Dynamics and Stability of Multi-legged Runners, 25(9), 889–902.

Shahdi, Ali, see Sirouspour, Shahin.

Singh, Hanumant, see Eustice, Ryan M.

Sirouspour, Shahin and Ali Shahdi, Discrete-time Linear Quadratic Gaussian Control for Teleoperation Under Communication Time Delay, 25(2), 187–202.

Slotine J.J.E., see Cheah, C. C.

Smith, Andrew and Keyvan Hashtrudi-Zaad, Smith Predictor Type Control Architectures for Time Delayed Teleoperation, 25(8), 797–818.

Sriram, T. V. N., see Varadhan, G.

Stefanini, Cesare, Arianna Menciassi and Paolo Dario, Modeling and Experiments on a Legged Microrobot Locomoting in a Tubular, Compliant and Slippery Environment, 25(5), 551–560.

Steger, Ryan, see Kazerooni, H.

Stentz, Anthony, see Kelly, Alonzo.

Stentz, Anthony, see Zlot, Robert.

Sugiyama, Yuuta and Shinichi Hirai, Crawling and Jumping by a Deformable Robot, 25(5), 603–620.

Sukhatme, Gaurav S., see Parker, Lynne E.

Sun, D., Ren, L., J. K. Mills, and C. Wang, Synchronous Tracking Control of Parallel Manipulators Using Cross-coupling, 25(11), 1137–1148.

Takuma, Takashi and Koh Hosoda, Controlling the Walking Period of a Pneumatic Muscle Walker, 25(9), 861–866.

Tanaka, Shinji, see Kawahara, Tomohiro.

Thayer, Scott, see Kelly, Alonzo.

Thrun, Sebastian and Michael Montemerlo, The Graph-SLAM Algorithm with Applications to Large-Scale Mapping of Urban Structures, 25(5), 403–429.

Thrun, Sebastian, see Gerkey, Brian.

Ueno, Hiroshi, see Lichter, Matthew.

Ueno, Takao, see Yokoi, Kazuhito.

Vallidis, Nick, see Kelly, Alonzo.

Van Damme, Michaël, see Vanderborght, Bram.

van der Helm, F. C. T., see Veneman, J. F.

van der Kooij, H., see Veneman, J. F.

Van Ham, Ronald, see Vanderborght, Bram.

Vandapel, Nicolas, Raghavendra Rao Donamukkala, and Martial Hebert, Unmanned Ground Vehicle Navigation Using Aerial Ladar Data, 25(1), 31–51.

Vandapel, Nicolas, see Huber, Daniel F.

Vanderborght, Bram, see Vermeulen, J.

Vanderborght, Bram, Björn Verrelst, Ronald Van Ham, Michaël Van Damme, Dirk Lefeber, Bruno Meira Y Duran, Pieter Beyl, Exploiting Natural Dynamics to Reduce Energy Consumption by Controlling the Compliance of Soft Actuators, 25(4), 343–358.

Varadhan G., S. Krishnan, T. V. N. Sriram, and D. Manocha, A Simple Algorithm for Complete Motion Planning of Translating Polyhedral Robots, 25(11), 1049–1070.

Veneman, J. F., R. Ekkelenkamp, R. Kruidhof, F.C.T. van der Helm, and H. van der Kooij, A Series Elastic- and Bowden-Cable-Based Actuation System for Use as Torque Actuator in Exoskeleton-Type Robots, 25(3), 261–281.

Vermeulen, J., B. Verrelst, B. Vanderborght, D. Lefeber and P. Guillaume, Trajectory Planning for the Walking Biped 'Lucy', 25(9), 867–887.

Verrelst, Björn, see Vermeulen, J.

Verrelst, Björn, see Vanderborght, Bram.

Vollmers, Karl, see Yesin, Berk.

Wade, Bruce A., see Armstrong, Brian.

Wakamatsu, Hidefumi, Eiji Arai, and Shinichi Hirai, Knotting/Unknotting Manipulation of Deformable Linear Objects, 25(4), 371–395.

Walter, Matthew R., see Eustice, Ryan M.

Wang, C., see Sun, D.

Wang, Han, see Chen, Cheng.

Warner, Randy, see Kelly, Alonzo.

Webster III, Robert J., Jin Seob Kim, Noah J. Cowan, Gregory S. Chirikjian and Allison M. Okamura, Nonholonomic Modeling of Needle Steering, 25(5), 509–525.

Wellington, C., A. Courville, and A. Stentz, A Generative Model of Terrain for Autonomous Navigation in Vegetation, 25(12), 1287–1304.

Wijesoma, Wijerupage Sardha, see Perera, L. D. L.

Wikander, Jan, see Ingvast, Johan.

Wörgötter, Florentin, see Geng, Tao.

Yanagihara, Yoshitaka, see Yokoi, Kazuhito.

Yeh, Hsien-Chi, see Pham, Huy-Hoang.

Yesin, K. Berk, Karl Vollmers and Bradley J. Nelson, Modeling and Control of Untethered Biomicrorobots in a Fluidic Environment Using Electromagnetic Fields, 25(5), 527–536.

Yokoi, Kazuhito, Katsumi Nakashima, Masami Kobayashi, Humisato Mihune, Hitoshi Hasunuma, Yoshitaka Yanagihara, Takao Ueno, Takuya Gokyuu and Ken Endou, A Tele-operated Humanoid Operator, 25(5), 593–602.

Yoon, J., and Jeha Ryu, A Novel Locomotion Interface with Two 6-DOF Parallel Manipulators That Allows Human Walking on Various Virtual Terrains, 25(7), 689–708.

Zachi, A. R. L., L. Hsu, R. Ortega, and F. Lizarralde, Dynamic Control of Uncertain Manipulators Through Immersion and Invariance Adaptive Visual Servoing, 25(11), 1149–1159.

Zelinsky, Alexander, see Petersson, Lars.

Zlot, Robert and Anthony Stentz, Market-based Multirobot Coordination for Complex Tasks, 25(1), 73–101.

# Erratum

In the November issue, page 1137, Synchronous Tracking Control of Parallel Manipulators Using Cross-coupling, one of the author's names was wrongly spelled: Instead of "R. Lu", it should read "L. Ren".